

IN THE CLAIMS:

Claims 7, 12 and 13 are set forth below for the Examiner's convenience.

1. to 6. (Cancelled)

7. (Previously Presented) A detection method for detecting a plurality of different substances contained in a specimen using a same label, comprising sequentially the steps of:
flowing the specimen through a detecting element having a first substance trapping portion immobilizing a first substance trapping body for specifically trapping a first substance contained in the specimen, a second substance trapping portion immobilizing a second substance trapping body for specifically trapping a second substance contained in the specimen, the second substance being different from the first substance, and a channel, with the first substance trapping portion being different than the second substance trapping portion;

flowing a solution containing the label through the first substance trapping portion immobilizing the first substance trapping body and the second substance trapping portion immobilizing the second substance trapping body, the label comprising a first group of label molecules bonded with a third substance trapping body capable of specifically acting on the first substance and a second group of label molecules bonded with a fourth substance trapping body capable of specifically acting on the second substance;

flowing a solution for generating a signal from the label through the first substance trapping portion immobilizing the label such that a first layer of aqueous solution flow through the first substance trapping portion and a second layer of aqueous solution flow through the

second substance trapping portion coexist while a third layer of alcoholic solution flow exists between the first layer of aqueous solution flow and the second layer of aqueous solution flow and that the solution for generating a signal from the label forms the first layer of aqueous solution flow, to thereby acquire a signal from the first substance trapping portion; and

flowing a solution for generating a signal from the label through the second substance trapping portion immobilizing the label such that a first layer of aqueous solution flow through the first substance trapping portion and a second layer of aqueous solution flow through the second substance trapping portion coexist while a third layer of alcoholic solution flow exists between the first layer of aqueous solution flow and the second layer of aqueous solution flow and that the solution for generating a signal from the label forms the second layer of aqueous solution flow, to thereby acquire a signal from the second substance trapping portion.

8. to 11. (Cancelled).

12. (Previously Presented) A detection method according to claim 7, wherein the label is an enzyme and the solution for generating a signal from the label is a solution containing a substrate for the enzyme.

13. (Previously Presented) A detection method according to claim 7, wherein the label is pH-sensitive fluorescent dye and the solution for generating a signal from the label is a solution having a pH which changes a fluorescent characteristic of the pH-sensitive fluorescent dye.